

(FILE 'HOME' ENTERED AT 13:45:26 ON 23 OCT 2000)

FILE 'CAPLUS, WPIDS, CABA, AGRICOLA' ENTERED AT 13:45:40 ON 23 OCT 2000

L1	349 S REFLECT? (25A) REPEL?
L2	8017 S REPEL? (25A) (INSECT# OR PEST# OR APHID# OR THRIP#)
L3	41 S L1 AND L2
L4	37 DUP REM L3 (4 DUPLICATES REMOVED)

L4 ANSWER 1 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 2000-177887 [16] WPIDS
DNN N2000-132685

TI **Insect repellent** window screen for residence, office,
has aluminum foils which **reflect** external incident heat rays.

DC Q48

PA (ODAG-I) ODAGIRI M

CYC 1

PI JP 2000027568 A 20000125 (200016)* 5p

ADT JP 2000027568 A JP 1998-208678 19980707

PRAI JP 1998-208678 19980707

AB JP2000027568 A UPAB: 20000522

NOVELTY - An **insect repelling** net area (16) and
external incident heat rays **reflecting** aluminum foil (17) are
arranged alternately within a net (12). The aluminum foil is formed with
many holes of small diameter which **repels insects**.

USE - For natural air-conditioning of residence, office, factory,
vehicle.

ADVANTAGE - Avoids requirement energy for heating indoor side of
building or vehicle by using heat reflecting aluminum foil in window
screen, thereby conserves energy. Prevents mosquito, fly and other insects
entering inside room by providing net. Enables to deploy and retract
window screen according to requirement. Enables easy application of
aluminum foil on the net, thereby reducing manufacturing cost. DESCRIPTION
OF DRAWING(S) - The figure shows the enlarged front view of portion of the
net of the window screen. (12,16) Net areas; (17) Aluminum foil.

Dwg.2/5

L4 ANSWER 2 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 2000-154250 [14] WPIDS
DNN N2000-115233

TI Collar or belly band for pet.

DC P14

PA (SEGA-N) SEGAWA SEISAKUSHO KK

CYC 1

PI JP 2000014268 A 20000118 (200014)* 9p

ADT JP 2000014268 A JP 1998-201213 19980630

PRAI JP 1998-201213 19980630

AB JP2000014268 A UPAB: 20000320

NOVELTY - A suspending tool (14) used in suspending small articles, e.g.
name tag (21), license (25), light-**reflecting** note, decoration,
bell, **insect-repelling** tool, is provided at an
appropriate spot along the collar.

USE - For pet.

ADVANTAGE - Ensures easy and safe attachment of suspending tool
without damaging finger of user or pawl. Collar does not obstruct sleeping
posture of pet wearing collar. Prevents damage on foot of pet when
scratching neck or its surrounding area.

DESCRIPTION OF DRAWING(S) - The figure shows the isometric view of
the pet collar.

Suspending tool 14

Name tag 21

License 25

Dwg.1/7

L4 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2000 ACS
AN 2000:695170 CAPLUS

TI Mechanical properties and morphology of **insect repelling**
agricultural mulching film

AU Park, Jong Shin; Cho, Jae Whan; Chun, Byoung Chul
 CS Department of Polymer Engineering, The University of Suwon, Gyeonggi-do,
 445-743, S. Korea
 SO J. Korean Fiber Soc. (2000), 37(8), 455-462
 CODEN: HSKCDQ; ISSN: 1225-1089
 PB Korean Fiber Society
 DT Journal
 LA Korean
 AB Agricultural polyethylene mulching film contg. a UV **reflective**
 additive which is known to exhibit **insect repelling**
 ability was manufd. By measuring UV **reflectance** ratio (RA/RB)
 which is known as a criterion for **insect repellency**,
 the optimum compn. of mulching film was investigated. Also, the mech.
 properties and the corresponding morphol. of the above films were
 investigated. Tismo-D was used as a UV reflective additive and the compn.
 of Tismo-D in prepd. mulching film was varied from 0 to 10 wt%.
 Meanwhile, in order to investigate the reproducibility of the film for
 mech. properties, bulk samples with the identical compns. were also prepd.
 and their mech. property and morphol. were analyzed. The max. RA/RB was
 obtained at 3 wt% Tismo-D, and max. mech. property were obtained at the
 same Tismo-D content.

L4 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1
 AN 1999:401674 CAPLUS
 DN 131:40969

TI **Reflective particles as insect repellents**
 for plants, especially useful for **repelling** virus-vector
insects

IN Sander, Ronen
 PA Merck Patent G.m.b.H., Germany; Limerick Ltd.
 SO PCT Int. Appl., 19 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9930563	A1	19990624	WO 1998-EP8004	19981209
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9922690	A1	19990705	AU 1999-22690	19981209
	EP 1041886	A1	20001011	EP 1998-966268	19981209
	R: DE, ES, FR, GR, IT, PT				
	ZA 9811457	A	19990615	ZA 1998-11457	19981214
PRAI	EP 1997-122216		19971217		
	WO 1998-EP8004		19981209		

AB The invention relates to a method for protecting growing plants from insects and from insect-transmitted plant viruses, which comprises applying to surfaces of plants and their background, a compn. comprising reflective particles of at least one substance, provided that this is not solely uncoated aluminum. Suitable reflective particles are TiO₂- and/or Fe₂O₃-coated mica, reflective Cu, etc.

RE.CNT 2

RE
 (1) Nissan Chem Ind Ltd; JP 08280210 A 1996
 (2) Tomono Nouyaku Kk; JP 60149508 A 1985

L4 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2000 ACS
 AN 1998:758474 CAPLUS
 DN 129:331887
 TI **Pest-repelling** waterproof sheets for greenhouse

IN Uehara, Hirofumi
PA Keiwa Shoko K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10309138	A2	19981124	JP 1997-121912	19970513
AB	Title sheets have light-reflective surface. The sheets protect crops from insects and small animals. A sheet comprising synthetic resin surface layer, metal deposition layer, adhesive layer, and metal foil layer was exemplified.				

L4 ANSWER 6 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1998-601045 [51] WPIDS
DNN N1998-468435
TI Electric wave reflection prevention structure for buildings - has ferrite electromagnetic wave absorber arranged at backside of planar resistor inside nonconductive cover.
DC Q43 V04
PA (DENP-N) DENPA HOSHO ENG KK
CYC 1
PI JP 10270890 A 19981009 (199851)* 10p
ADT JP 10270890 A JP 1997-91547 19970326
PRAI JP 1997-91547 19970326
AB JP 10270890 A UPAB: 19981223
The structure has a planar resistor (34) provided inside a non conductive cover (31), which is covering the front face of an airscoop (20) in the upper surface of a building. A ferrite electromagnetic wave absorber or a quarter wavelength electromagnetic wave absorber having a multifunction **reflector** consisting of an **insect repellent** wire gauze (21) is arranged at the backside of the planar resistor.
USE - For TV.
ADVANTAGE - Improves electric wave absorption characteristic.
Prevents electric wave reflection failure resulting from air scoop.
Dwg.1/13

L4 ANSWER 7 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1998-433679 [37] WPIDS
DNC C1998-131056
TI Topical oil in water composition, has good stability and activity - comprises **insect repellent**, ultraviolet blocker, hydrophilic surfactant and higher alcohol.
DC A96 B07 C07 D21
PA (KOSE-N) KOSE KK
CYC 1
PI JP 10182344 A 19980707 (199837)* 6p
ADT JP 10182344 A JP 1996-356993 19961226
PRAI JP 1996-356993 19961226
AB JP 10182344 A UPAB: 19980916
Topical oil in water composition (I), comprises: (A) 1-20 wt.% **insect repellent**; (B) 1-15 wt.% ultraviolet blocker; (C) 0.1-15 wt.% hydrophilic surfactant with a HLB of 8 or more; and (D) 0.1-10 wt.% higher alcohol.
USE - (I) **repels insects** and **reflects** UV rays.
ADVANTAGE - (I) has good stability and activity.
Dwg.0/0

L4 ANSWER 8 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1998-354868 [31] WPIDS
DNN N1998-277994 DNC C1998-108877
TI Light-shielding multi-film and its extension, used in culture of *Zubgiber mioga* Roscoe, *Zingiberaceae* - has at least one shielding layer of specified thickness and is folded to a predetermined width.
DC A97 P13 P73

PA (OKUR) OKURA IND CO LTD
CYC 1
PI JP 10136801 A 19980526 (199831)* 6p
ADT JP 10136801 A JP 1996-292737 19961105
PRAI JP 1996-292737 19961105
AB JP 10136801 A UPAB: 19980805

A light-shielding multi-film consists of a film having at least one shielding layer of a thickness of 15-40 microns and folded to a width of about a half the unfolded width in with the longitudinal direction.

Preferably the film is a multi-layer film having at least one shielding and one **insect-repelling** layer and folded in the longitudinal direction with the shielding layer inward.

Preferably the repelling layer has an area without the repelling effect in the longitudinal direction. Preferably the area without the repelling effect has a width of 1/4 to 3/4 of the unfolded width. Pref. the shielding layer contains a black pigment. Pref. the **repelling** layer contains a titanium type **repelling** pigment having a **reflection** peak below 400 nm or a silver-colour pigment. Pref. the area without the **repelling** effect contains hematite or magnetite. Pref. the folded part of the film is fixed with fasteners.

Also claimed is prepn. of the film comprising forming a uni- or a multi-layer tubular film, with the latter formed by multi-layer inflation, folding the film flatly and cutting the folded film in the longitudinal direction.

USE - The multi-film is typically used in culture of Zubgiber mioga Roscoe, Zingiberaceae.

ADVANTAGE - The film has good light-shielding functions and is quite readily extendable. It opt. has **insect-repelling** effects.
Dwg.0/6

L4 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2000 ACS
AN 1997:542774 CAPLUS
DN 127:172606

TI **Insect repellent** sheets against cockroach
IN Tomioka, Toshikazu; Tomita, Katsuki; Nishino, Atsushi; Ohashi, Hideyuki; Nagakoshi, Toshiaki
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09208403	A2	19970812	JP 1996-15134	19960131

AB Title sheets comprise (A) successively laminated **insect-repellent**-contg. layer, light-**reflective** layer, adhesive layer, and the **repellent**-nonpermeable layer, (B) successively laminated light-**reflective** layer, **insect-repellent**-contg. hot-melt layer, and the **repellent**-nonpermeable layer, or (C) an **insect-repellent**-nonpermeable layer adhered with a layer comprising light-**reflective** fibrous or band-like materials knitted with the **repellent**-contg. fibers. A fabric made of a narrow strip of Al-deposited polyester film and a yarn was laminated with an acrylic adhesive and a polyester film and coated with a **insect repellent** at 4.25 g/m2 to show excellent cockroach **repelling**.

L4 ANSWER 10 OF 37 CABA COPYRIGHT 2000 CABI
AN 1998:63775 CABA
DN 980501950
TI Evolution of repellent tolerances in representative arthropods
AU Rutledge, L. C.; Gupta, R. K.; Mehr, Z. A.
CS Department of Entomology, Walter Reed Army Institute of Research, Washington, DC 20307-5100, USA.
SO Journal of the American Mosquito Control Association, (1997) Vol. 13, No.

4, pp. 329-334. 30 ref.

ISSN: 8756-971X

DT Journal

LA English

AB Eight commercial **insect repellents** (dimethyl phthalate, butopyronoxyl, MGK **Repellent 11** (1,5a,6,9,9a,9b-hexahydro-4a(4H)-dibenzofurancarboxaldehyde), Citronyl (3-acetyl-2-(2,6-dimethyl-5-heptenyl)oxazolidine), deet [diethyltoluamide], ethyl hexanediol [ethohexadiol], MGK **Repellent 326** (dipropyl 2,5-pyridinedicarboxylate) and dibutyl phthalate) were tested against *Ornithodoros parkeri*, *Dermacentor variabilis*, *Aedes aegypti* and *Xenopsylla cheopis*. Patterns of tolerance to the test materials were distinctive for each test species. Levels of tolerance were coded as character state 0 (sensitive), 1 (intermediate), or 2 (tolerant) and mapped on a cladogram **reflecting** the accepted classification of the test species. Character state 0 was regarded as primitive, as indicated by the ontology of **repellent** tolerances in ticks. *A. aegypti* was least evolved and *X. cheopis* was most evolved in tolerance to repellents. Multiple parallelism of the arachnid and *X. cheopis* lines occurred in the evolution of the observed tolerances.

L4 ANSWER 11 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

AN 1996-363497 [37] WPIDS

DNN N1996-306428

TI Container liquid level display e.g. for **insect repellent**
- from back wall of aluminium if light-absorbing fluid, e.g. water or **insect repellent** is not present.

DC S02 X27

IN FREITAG, R; MEIXNER, H

PA (SIEI) SIEMENS AG

CYC 1

PI DE 19504173 A1 19960808 (199637)* 4p

ADT DE 19504173 A1 DE 1995-19504173 19950207

PRAI DE 1995-19504173 19950207

AB DE 19504173 A UPAB: 19960918

An **insect repellent** or air freshener is heated in a container using a heating device before dispersing around a room. To determine whether or not the container is still full, the container, which is optically transparent on one side (F), is illuminated with light from an LED. The colour of the light emitted by the LED is complementary to the colour of the **insect repellent** or other material (S) in the container.

Since the **insect repellent** absorbs light, light only hits the inner wall of the container through **reflection** if the container is empty. The container may also contain water. The back wall (W) of the container is made of aluminium, which reflects light.

USE/ADVANTAGE - Air purifiers. No need to remove container from heating appts..

Dwg.1/1

L4 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2

AN 1995:657629 CAPLUS

DN 123:34898

TI Silver mulch film

IN Tanaka, Suminori; Shimada, Tatsuo; Nishihara, Masaharu

PA Okura Industrial Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

JP 07070339	A2	19950314	JP 1993-219501	19930903
-------------	----	----------	----------------	----------

AB The title silver mulch film is obtained by incorporating Al powder and a crystn. inhibitor to an olefinic resin and film forming, then laminating a thermoplastic resin to 1 or both sides of the above film. The **reflection** of the sun's rays is greatly improved, the rise in soil

temp. is suppressed, and the **insect repellent** properties are increased.

L4 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2000 ACS
AN 1994:210843 CAPLUS
DN 120:210843
TI Metallic tapes as animal repellents in crop field
IN Saruwatari, Akishi
PA Sankyo Kasei Kogyo Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05308882	A2	19931122	JP 1991-68717	19910309
AB	Metallic tapes placed over the crop field such as rice paddy to repel birds and insects are manufd. with metallic strips (e.g. aluminum) coated with plastic materials (e.g. polyester). Animals are repelled by reflective light from the tapes. The makeup of the tape is shown by diagrams. These tapes are not hazardous materials in the environment.				

L4 ANSWER 14 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1992-131819 [16] WPIDS
DNN N1992-098342

TI Cultivation pot protection device for handling samplings - has wall of pot seizing root lump of sapling and providing protection for sapling after planting.

DC P13
IN NILSSON, B
PA (NILS-I) NILSSON B
CYC 15

PI WO 9204821 A 19920402 (199216)* EN 12p
RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
W: CA US

SE 9003402 A 19920318 (199223)
ADT WO 9204821 A WO 1991-SE629 19910917; SE 9003402 A SE 1990-3402 19901024
PRAI SE 1990-2977 19900917; SE 1990-3043 19900925; SE 1990-3402 19901024

AB WO 9204821 A UPAB: 19931006
A protecting device (22) for saplings (24) has a cultivation pot with a wall surrounding the sapling. A clamping arrangement (23), connected to the wall, maintains the root lump (6) of the sapling and the sapling itself in a constant position in relation to the device. When planted, part of the protective device is under the ground level and the part above ground level forms a protective shield against parasites.

The part of the device above the ground can be manufactured from, or coated by, light **reflecting** substances. The raw material of the device may include static eliminating and **insect repelling** additives.

ADVANTAGE - Will not cause environmental problems upon degradation.

(6/9)
6/9

L4 ANSWER 15 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1991-131760 [18] WPIDS
DNN N1991-101173

TI Electrical device **repelling** crawling **insects** from buildings - has potential difference applied between elongated conductors and insulating base so **insects** receive current when bridging contacts.

DC P14 X25
IN FIELDS, J G; SAUNDERS, A L
PA (SAUN-I) SAUNDERS A L
CYC 1

PI US 5007196 A 19910416 (199118)*

ADT US 5007196 A US 1990-477351 19900208

PRAI US 1987-119787 19871112; US 1989-367848 19890619; US 1990-477351 19900208

AB US 5007196 A UPAB: 19930928

The non-toxic, non-chemical device and system for **repelling** crawling **insects** from a structure such as a building and training the **insects** to go elsewhere. Closely-spaced elongated conductors are mounted on an insulating base and having a potential difference applied thereto for providing a insect-stunning short-circuit current of about fifteen microamps. When insects bridge the conductors, they receive a current as a function of their internal resistance.

The conductors are mounted via the base along the foundation and about posts and other structures which connect into the building. The conductors are also slippery and **reflective** to assist in **repelling** and training the **insects** without bridging the conductors.

USE/ADVANTAGAE - Eliminates infestation and buildings. Not shock animals a human beings. @(12pp Dwg.No. 16/20)@d

L4 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2000 ACS

AN 1989:627249 CAPLUS

DN 111:227249

TI Manufacture of plastic films containing complex oxides as **insect repellents**

IN Kitamura, Shuji; Nakae, Kiyohiko; Kotani, Kozo; Ikeda, Kota

PA Sumitomo Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01013005	A2	19890117	JP 1987-17747	19870127
JP 05051562	B4	19930803		

AB An **insect-repelling** film is prepd. from a thermoplastic resin contg. a complex oxide, $(\text{SiO}_2)_x.\text{cntdot}(\text{Al}_2\text{O}_3)_y.\text{cntdot}(\text{TiO}_2)_z.\text{cntdot}.\text{nH}_2\text{O}$ ($n = 0$ or integer; content of TiO_2 1-15% by wt.; x, y, z undefined). The film is used to cover ground and plants. The UV light with a specific wavelength **reflected** from the complex oxide is effective in **repelling insects**. Thus, low-d. polyethylene 100, $\text{SiO}_2.\text{cntdot}.\text{Al}_2\text{O}_3.\text{cntdot}.\text{TiO}_2.\text{cntdot}.\text{H}_2\text{O}$ (44.0, 37.5, 2.3, 11.0% by wt., resp.) 15, monoglyceryl monostearate 0.5, and Tinuvin-622 0.2 parts by wt. were mixed, heated to 150-160.degree. for 10 min, and made into pellets. These pellets were later made into a 30 .mu.m-thick film.

L4 ANSWER 17 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

AN 1989-226916 [31] WPIDS

DNN N1989-173174

TI Non-chemical insect guard system - has device that provides insect-stunning short-circuit current of about microamps.

DC P14 X25

IN FIELDS, J G

PA (SAUN-I) SAUNDERS A L

CYC 1

PI US 4839984 A 19890620 (198931)* 10p

ADT US 4839984 A US 1987-119787 19871112

PRAI US 1987-119787 19871112

AB US 4839984 A UPAB: 19930923

The non-toxic, non-chemical system for **repelling** crawling **insects** from a structure such as a building and training the **insects** to go elsewhere includes closely-spaced elongated conductors mounted on an insulating base and having a potential difference applied thereto for providing an insect-stunning short-circuit current of about fifteen microamps. When insects bridge the conductors, they receive a current as a function of their internal resistance. The conductors are mounted via the base along the foundation and about posts and other

structures which connect into the building.

Preferably, the conductors are also slippery and **reflective** to assist in **repelling** and training the **insects** without bridging the conductors.

ADVANTAGE - Poses no electrical shock hazard.

1/15

L4 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2000 ACS

AN 1988:438896 CAPLUS

DN 109:38896

TI **Insect-repelling** film or sheet

IN Kitamura, Shuji; Nakae, Kiyohiko; Kotani, Kozo; Kume, Takanori; Negawa, Hideo; Ikeda, Tsuneta

PA Sumitomo Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 255566	A1	19880210	EP 1987-101558	19870205
	EP 255566	B1	19910116		
	R: DE, ES, FR, GB, IT				
	JP 04058933	B4	19920918	JP 1986-185852	19860806
	AU 8768289	A1	19880211	AU 1987-68289	19870204
	AU 597933	B2	19900614		
	US 4826729	A	19890502	US 1987-11198	19870205
	CN 1011472	B	19910206	CN 1987-100857	19870206
PRAI	JP 1986-185852		19860806		
	JP 1985-173816		19850807		

AB The title films, useful in agriculture, forestry, and gardening, have reflective spectrum peaks at wavelengths $<0.4\mu$. and RA/RB ratio (RA = UV reflectance, RB = visible reflectance at 0.5μ .) ≥ 1.4 . A mixt. of low-d. polyethylene (melt index 1.5 g/10 min) 100, K titanate whiskers (Tismo D) 2, and glycerol monostearate 0.5 part was molded to a 30μ . sheet with total light transmission 71%, UV **reflective** peak at 0.37μ ., RA 24, RB 16, and, in use in mulching for cucumber plants, **insect repellency** (no. of **Thrips** palmi and Aphis gossypii/40 leaves) 106 and 121, resp., and growth rate of good crops 140%; vs 0, -, 88, 87, 38, 21, and 120, resp., for an alaminized polyethylene film.

L4 ANSWER 19 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

AN 1988-216832 [31] WPIDS

DNN N1988-165134 DNC C1988-096899

TI Agricultural useful film to **repel insects** - is obtd.

pref. from mixt. of thermoplastic resin and inorganic substance **reflecting** UV ray.

DC A97 E32 P13 P14

PA (SUMO) SUMITOMO CHEM IND KK

CYC 1

PI JP 63152930 A 19880625 (198831)* 5p

ADT JP 63152930 A JP 1986-300334 19861216

PRAI JP 1986-300334 19861216

AB JP 63152930 A UPAB: 19930923

Film comprises film having reflection peak at wavelength of 0.4 μ m or lower, the ratio of reflection rate of UV(RA)/that of visible ray having wavelength of 0.5 μ m(RB) of 1.5 or higher, and the ratio of reflection rate of visible ray having wavelength of 0.6 μ m or higher(RC)/RB of 1.5 or higher.

The film is prepd. from a mixt. of thermoplastic resin and inorganic substance reflecting UV ray. The resin includes polyethylene, ethylene-butene copolymer, ethylene-vinyl acetate copolymer, etc. The inorganic substance includes potassium titanate, calcium titanate, magnesium titanate, barium titanate, lithium titanate, etc.

USE/ADVANTAGE - The film has good **insect repelling** activity without giving bad influence of growth of plants and vegetables,

and thus can be used as coating of greenhouse for agricultural use, etc.
0/3

L4 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 3
AN 1988:95879 CAPLUS
DN 108:95879
TI **Insect-repellent** mulching films
IN Kitamura, Shuji; Nakae, Kiyohiko; Kotani, Kozo; Kume, Takanori; Kogawa, Hideo
PA Sumitomo Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62265927	A2	19871118	JP 1986-185853	19860806
	JP 04058934	B4	19920918		
	AU 8768288	A1	19880211	AU 1987-68288	19870204
	AU 596637	B2	19900510		
	EP 256201	A1	19880224	EP 1987-101553	19870205
	EP 256201	B1	19910116		
	R: DE, ES, FR, GB, IT				
	CN 1009793	B	19901003	CN 1987-100858	19870206
PRAI	JP 1985-175566		19850808		
	JP 1986-185853		19860806		

AB The title films, reflecting IR and inhibiting grass growth, consist of coextruded reflective layers [reflection peak at $<0.4 \mu$, $R_a/R_b >1.4$ (R_a , R_b = reflective index of UV and visible light, resp.)] and a black layer, optionally melt-perforated to give 0.3-10.0 mm holes. A blend of 1-butene-ethylene copolymer (I) 100, titanate fibers 20, and glycerol monostearate (II) 0.3 part was coextruded with a blend of I 100, carbon black 5, and II 0.1 part to give a 30- μ film with R_a/R_b 1.71, which **repelled insects**, inhibited grass growth, and lowered soil temps.

L4 ANSWER 21 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1987-169712 [24] WPIDS
DNN N1987-127314

TI **Pest repelling** method e.g. for fleas from domestic animals - using pulsed ultrasonic wave directed down from animal and **reflected** back to and incident on animal.

DC P14 X25 X27
IN JIMENEZ, O
PA (BIAN-I) BIANCO F J
CYC 1

PI US 4669424 A 19870602 (198724)* 11p

ADT US 4669424 A US 1985-742232 19850607

PRAI US 1985-742232 19850607

AB US 4669424 A UPAB: 19930922

The **pest-repelling** method involves the step of attaching an ultrasonic compressional wave energy source to the animal in such a position that a beam of the energy derived from the source is directed downwardly toward a surface on which the animal is located. Energy in the beam is **reflected** from the surface back to the animal. The energy has wave characteristics and sufficient intensity as **reflected** back to and incident on the animal to **repel** the **pests**.

The energy is repetitively pulsed on and off at a rate above a predetermined minimum that enhances **repelling** of the **pests**. Each pulse has an envelope with different amplitudes. The pulse has a carrier frequency in the 35-45 KHz range.

USE - Mainly cats and dogs to repel fleas and ticks.

1/9

L4 ANSWER 22 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1987-194434 [28] WPIDS

DNN N1987-145568 DNC C1987-080989
 TI **Insect repelling** thermoplastic resin film or sheet -
 having specified **reflection** peak and **reflection**
 spectrum.
 DC A97 C03 D22 P13 P14 P73
 PA (SUMO) SUMITOMO CHEM IND KK; (SUMO) SUMITOMO CHEM CO LTD
 CYC 10
 PI JP 62122545 A 19870603 (198728)* 7p
 EP 255566 A 19880210 (198806) EN
 R: DE ES FR GB IT
 AU 8768289 A 19880211 (198814)
 CN 87100857 A 19880217 (198914)
 US 4826729 A 19890502 (198920) 9p
 EP 255566 B 19910116 (199103)
 R: DE ES FR GB IT
 DE 3767401 G 19910221 (199109)
 ES 2019305 B 19910616 (199129)
 JP 04058933 B 19920918 (199242) 7p
 KR 9503265 B1 19950407 (199708)
 ADT JP 62122545 A JP 1986-185852 19860806; EP 255566 A EP 1987-101558
 19870205; US 4826729 A US 1987-11198 19870205; JP 04058933 B JP
 1986-185852 19860806; KR 9503265 B1 KR 1987-974 19870206
 FDT JP 04058933 B Based on JP 62122545
 PRAI JP 1986-185852 19860806; JP 1985-173816 19850807
 AB JP 62122545 A UPAB: 19971013
 Film or sheet has a reflection peak at wavelength less than 0.4 microns
 and reflection spectrum showing a ratio of UV reflectance RA to visible
 light (wavelength 0.5 microns) reflectance RB (i.e., RA/RB) of at least
 1.4.
 Thermoplastic resin (e.g., low or high density polyethylene,
 ethylene-butene-1 copolymer, ethylene-4-methyl-pentene-1 copolymer,
 ethylene-vinyl acetate copolymer, ethylene-acrylic acid copolymer,
 polypropylene) can be used for prodn. of film or sheet.
 The sheet or film can be prepd. using the above resin having the
 required property, or by adding to the resin an inorganic or organic cpd.
 having the reflection spectrum. Such cpds. are potassium titanate,
 calcium titanate, magnesium titanate, barium titanate, zirconium silicate,
 zirconium oxide, etc. These inorganic cpds. can be powdered or
 whisker-like. The amt. of inorganic cpd. is pref. 0.2-2 wt.%.
 USE/ADVANTAGE - The film or sheet is used for agriculture, forestry
 and gardening. It **repels** harmful **insects** such as
aphids.
 Dwg.0/0

L4 ANSWER 23 OF 37 CABA COPYRIGHT 2000 CABI
 AN 89:105537 CABA
 DN 891134171
 TI Study of the **repellent** activity of aluminium pigment against
aphids
 Az aluminiumpigment leveltetvekrekre gyakorolt repellens hatasanak,
 vizsgalata
 AU Geza, K.
 SO Mosonmagyaróvári Mezőgazdaságtudományi Kar Közleményei, (1986) Vol. 28,
 No. 2, pp. 129-142. 24 ref.
 DT Journal
 LA Hungarian
 SL English; German; Russian
 AB Aluminium pigment was tested in the field in Hungary for its
repellent effect on *Myzus persicae*, an important vector of virus
 diseases. The **reflecting** surface of the pigment and the
repellent effect of the pigment prevented migrating **aphids**
 from landing on the plants. A reduction in the amount of pigment used and
 an increase in rain resistance are necessary before the method can be used
 successfully on a large scale. The advantages of the method are discussed
 with particular reference to its environmental benefits.

L4 ANSWER 24 OF 37 CABA COPYRIGHT 2000 CABI
 AN 87:3532 CABA

DN 871655829
 TI Preliminary study on the effect on CMV disease of a new hairy tomato variety and F1 hybrid
 AU Zheng, G. P.; Yu, H. P.
 CS Xian Inst. Agric., Shaanxi, China.
 SO Scientia Agricultura Sinica, (1986) No. 4, pp. 57-61. 9 ref.
 ISSN: 0578-1752
 DT Journal
 LA Chinese
 SL English
 AB The variety DamaoT, with dense hairs and Tm-2nv for resistance to tobacco mosaic virus, was derived from hairy germplasm and was used as maternal parent in a cross with a nonhairy variety. The resulting F1 has dense, long, white hairs covering the plant which confer good resistance to **aphids**. It is suggested that the **aphids** are **repelled** by the light **reflected** from the plant, as well as by the difficulty of moving and feeding when they alight. Some **aphids** do feed from the lower and middle parts of the plant, however, during migration, so prevention of transfer of cucumber mosaic virus (CMV) is not complete. Covering fields of young plants with grey-silver plastic film is suggested as an extra control measure.

L4 ANSWER 25 OF 37 CABA COPYRIGHT 2000 CABI
 AN 87:72917 CABA
 DN 870346009
 TI Cultural techniques for autumn tomatoes mulched with silver-coloured films
 AU Gu, Z. X.
 CS Institute of Horticulture, Shanghai Academy of Agricultural Sciences, Shanghai, China.
 SO Shanghai Agricultural Science and Technology, (1986) No. 4, pp. 7-8, 20.
 DT Journal
 LA Chinese
 AB Seedlings were raised in beds mulched with silver film and covered by 80-cm-high frames over whose sides and top 5- to 10-cm wide strips of silver film were stretched at 33-cm intervals. The silver film showed **aphid-repellent** properties which resulted in lower virus-disease incidence (c. 10%) and higher light **reflectance** than other coloured films. Yields of tomatoes from mulched fields were 20-176% above those from unmulched fields. Basal application of 5000-6000 jin/mu chicken manure or 10 000 jin night soil plus urine, followed after mid-October by 3-4 treatments with 0.5% KH₂PO₄ plus 0.5% urine applied at 7- to 10-day intervals, resulted in a yield of 5000 jin/mu. Application of 5000 jin/mu pig manure plus 100 jin compound fertilizer as a basal treatment followed by 30 jin urine as a topdressing, or of 200 jin compound fertilizer (N:P:K = 10:6:8) plus 80 jin urine as a basal treatment followed by 30 jin urine as a topdressing on 8 October, also gave satisfactory results. The optimum spacing was 75 x 30-33.3 cm, i.e. 2667-2963 plants/mu. [1 jin = 0.5 kg, 1 mu = 0.067 ha.]

L4 ANSWER 26 OF 37 CABA COPYRIGHT 2000 CABI
 AN 86:1626 CABA
 DN 860530736
 TI Reduction of greenbug (Homoptera: Aphididae) populations by surface residues in wheat tillage studies
 AU Burton, R. L.; Krenzer, E. G., Jr.
 CS Plant Science Research Laboratory, ARS, USDA, PO Box 1029, Stillwater, Oklahoma 74076, USA.
 SO Journal of Economic Entomology, (1985) Vol. 78, No. 2, pp. 390-394. 3 fig. 17 ref.
 ISSN: 0022-0493
 DT Journal
 LA English
 AB The effect of the use of minimum tillage in small grain production on insect populations was studied at 3 locations in Oklahoma by establishing wheat tillage plots 15 x 30 m. The 4 tillage treatments used were mouldboard or bottom plough (no surface residue), disc (minimum residue), V-blade (moderate residue) and no-till (maximum residue). Monitoring of other plots indicated that in all cases, populations of Schizaphis

graminum were substantially reduced in plots in which surface residues were moderate to high, compared to conventionally tilled plots in which residues were low. Wheat surface residues may serve as a **reflective** mulch that either **repels** the settling **aphids** or masks the existing attractancy of conventionally tilled plots.

L4 ANSWER 27 OF 37 CABA COPYRIGHT 2000 CABI
AN 85:26378 CABA
DN 850522611
TI Efficacy of aldicarb against susceptible and resistant *Myzus persicae*
AU Rice, A. D.; Stribley, M. F.; Sawicki, R. M.
CS Rothamsted Experimental Station, Harpenden, Herts., AL5 2JQ, United Kingdom.
SO (1984) pp. 547-552. 4 fig. 9 ref.
Publisher: British Crop Protection Council. Croydon
Meeting Info.: 1984 British Crop Protection Conference. Pests and diseases. Proceedings of a conference held at Brighton Metropole, England, November 19-22, 1984. Volume 2.
CY United Kingdom
DT Miscellaneous
LA English
AB An insecticide-resistant and 2 susceptible clones of *Myzus persicae* were caged at intervals over a 9-week period on potted Chinese cabbage or sugarbeet plants grown in compost alone or in compost containing aldicarb at the highest field-equivalent rate. Treatment reduced aphid survival, settling and ability to transmit virus; the numbers that survived closely **reflected** resistance status, but the numbers of survivors settled and their ability to transmit did not, suggesting a **repellent** effect of the treatment. The results are discussed in the context of **aphid-** and virus-control in sugarbeet.

L4 ANSWER 28 OF 37 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1982-58297E [28] WPIDS
TI Mulch having water charged in synthetic resin film tube - where bottom surface facing ground is light reflective to prevent viruses caused by aphids.
DC A97 P13 P14 Q74
PA (KANE) KANEBO LTD
CYC 1
PI JP 57091127 A 19820607 (198228)* 4p
PRAI JP 1980-164185 19801120
AB JP 57091127 A UPAB: 19930915
In mulch where water is charged in tube-like synthetic resin film, the upper surface facing the sun comprises a transparent synthetic resin film, and the bottom surface facing the ground comprises a light-reflective synthetic resin film.
Pref. transparent resin films are polymers, e.g. polyethylene, polypropylene, PVC, copolymers etc. Thickness of polymer is not critical, and is preferably 20-100 microns. The light reflecting property can be imparted by vacuum depositing or coating metal powder (e.g. Al powder, Sn powder) on the film, and the thickness of the film with light-reflecting property is preferably 20-100 microns.
The water-charging mulch has excellent heat retaining and antiviral properties. Since the mulch has light-**reflecting** property, it has an **aphide-repelling** effect, and so virus diseases caused by aphides can be prevented.

L4 ANSWER 29 OF 37 CABA COPYRIGHT 2000 CABI
AN 82:32560 CABA
DN 820592870
TI Pathogens, vectors, and plant diseases: approaches to control
AU Harpaz, I.; Tomlinson, J. A.; Cohen, S.; Lamberti, F.; Basile, M.; Simons, J. M.; Quiot, J. B.; LaBonne, G.; Marrou, J.; Kahn, R. P.; Foster, J. A.; Harris, K. F. [EDITOR]; Maramorosch, K. [EDITOR]
CS Department of Entomology, Texas A&M University, College Station, Texas, USA.
SO Pathogens, vectors, and plant diseases: approaches to control, (1982) pp.

xii+310. many fig., 230 X 160 mm. many ref.

Publisher: Academic Press. New York

Price: \$48; pounds-sterling 31.80.

ISBN: 0-12-326440-5

CY United States

DT Book

LA English

AB This is the fifth and final volume of a series on vectors of plant pathogens [see RAE/A 70, 1775, etc.] and the intention of the editors is to illustrate how knowledge of interactions between pathogen, vector and host, of vector ecology and of disease epidemiology is being applied to the prevention and control of plant diseases. In particular, attention is focused on the less commonplace strategies (since the better-known ones have already been the subject of numerous reviews), especially innovative strategies on the frontiers of control-oriented research that have proved their application in the field or that show considerable promise. The 12 chapters, contributed by 16 authors, include several concerned with insect vectors. These are one on non-pesticidal control of vector-borne plant diseases (including repellence by reflective surfaces, sticky yellow traps, barriers and bafflers, and possibilities of biological and integrated vector control); one on the control of whiteflies (especially Bemisia tabaci(Gennadius)) by colour mulches; one on the use of oil sprays and reflective surfaces for the limitation of insect-transmitted plant viruses; one on the control of seed- and insect-borne viruses at the field, regional and international level; one on exclusion (by quarantine) as a means of control; one on plant quarantine problems in the USA as they relate to the exclusion of potential or actual vectors; one on aphid probing and feeding, on electronic monitoring of feeding behaviour and on plant breeding for resistance to aphids; one on the ESS ('evolutionarily stable strategy') concept of J. Maynard Smith & G.R. Price as applied to an aphid 'pathosystem'; and one on the control of vector-borne mycoplasma plant diseases. ADDITIONAL ABSTRACT: This book which gives a very full account of control of plant pathogens includes three chapters relevant to nematology: Lamberti, F.; Basile, M. Chemical control of nematode vectors (57-69). Kahn, R.P. The host as a vector: exclusion as a control (123-149). Bingefors, S. Nature of inherited nematode resistance in plants. Abstracts will be found in the relevant classifications of Hm/B. ADDITIONAL ABSTRACT: The following contributions are included: Harpaz, I. Nonpesticidal control of vector-borne diseases (1-21). Tomlinson, J.A. Chemotherapy of plant viruses and virus diseases (23-44). Cohen, S. Control of whitefly vectors of viruses by color mulches (45-56). Lamberti, F.; Basile, M. Chemical control of nematode vectors (57-69). Simons, J.M. Use of oil sprays and reflective surfaces for control of insect-transmitted plant viruses (71-93). Quiot, J.B.; LaBonne, G.; Marrou, J. Controlling seed and insect-borne viruses (95-122). Kahn, R.P. The host as a vector: exclusion as a control (123-149). Foster, J.A. Plant quarantine problems in preventing the entry into the United States of vector-borne plant pathogens (151-185). Maramorosch, K. Control of vector-borne mycoplasmas (265-295). An index is appended.

L4 ANSWER 30 OF 37 CABA COPYRIGHT 2000 CABI

AN 79:26509 CABA

DN 790560578

TI Effect of reflecting surfaces on the behaviour of aphids

Effet des surfaces reflechissantes sur le comportement des aphids

AU Matthieu, J. L.; Esparza-Duque, J.; Verhoyen, M.; Duque, J. Esparza-

CS Laboratoire de Phytopathologie, Universite Catholique de Louvain, Louvain-la-Neuve, Belgium.

SO Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit Gent, (1977) Vol. 42, pp. 1421-1431. 4 fig. 11 ref.

Meeting Info.: Faculteit van de Landbouwwetenschappen Gent: Gent, Faculteit van de Landbouwwetenschappen: XXIX International Symposium on Phytopharmacy and Phytiatry, 1977.: XXIX Internationaal Symposium over Fytofarmacie en Fytiatrie, 1977.

DT Journal

LA French

SL English

AB In further tests in Belgium with aluminium foil as a means of **repelling aphids** from crops [see RAE/A 65, 5360], which were carried out in 1975, a more detailed examination was made of the way in which these reflecting surfaces affected aphid behaviour. In the first test field, it was found that the amount of functional reflecting surface decreased as the plants grew more bushy, and that a decrease of less than 20% in reflecting surface reduced the numbers of aphids caught in Moericke traps in the field by about 50%. Measurement of light intensity showed that a zone of reflected radiation existed that moved according to the position of the sun. In the second test field, the flight altitudes of the **aphids** approaching the foil and its **repellent** effect was observed. A **repellent** effect was detected at 5 m from the **reflection** zone, the **aphids** flying much higher over the **reflecting** surfaces. Outside the **reflection** zone, most of the **aphids** flew at less than 0.8 m above ground level but 21% flew higher than 1.75 m. Various other factors affecting the degree of **repellency** of the **reflecting** surfaces are briefly discussed, including the intensity of solar radiation, the width of the **repellent reflecting** surface round the crop, the height of the crop and the direction of the wind.

L4 ANSWER 31 OF 37 CABA COPYRIGHT 2000 CABI
AN 77:29838 CABA
DN 770544121
TI Annual departmental report for the financial year 1975-76
AU Nichols, E. H.; Department of Agriculture and Fisheries, Hong Kong; Hong Kong, Department of Agriculture and Fisheries
SO Annual Departmental Report, Director of Agriculture and Fisheries, Hong Kong, (1976) pp. [7 +]57[+ 19] pp. 19 ref.
DT Report; Company Publication
LA English
AB This report on agriculture and fisheries in Hong Kong in 1975-76 includes a section on crop protection (p. 14), in which studies on the vector capabilities of *Myzus persicae* (Sulz.) and *Lipaphis erysimi* Kalt.), and field investigations on the **repellent** effects of **reflective** materials on these 2 **aphids**, are among the work reported. **Reflective** materials reduced populations in protected plots by a factor of 10, and were more effective against *M. persicae* than *L. erysimi*.

L4 ANSWER 32 OF 37 CABA COPYRIGHT 2000 CABI
AN 77:29984 CABA
DN 770544325
TI Reduction of infection by celery mosaic virus by means of spray applications of oil and **reflective** surfaces **repellent** to vectors
Reduction des infections de virus de la mosaïque du céleri par des pulvérisations d'huile et des surfaces réfléchissantes repulsives pour vecteurs
AU Esparza-Duque, J.; Verhoyen, M.; Duque, J. Esparza-
CS Laboratoire de Phytopathologie, Université Catholique de Louvain, Louvain la Neuve, Belgium.
SO Mededelingen van de Faculteit Landbouwwetenschappen Rijksuniversiteit Gent, (1975) Vol. 40, pp. 779-789. 3 fig. 12 ref.
Meeting Info.: Faculteit van de Landbouwwetenschappen, Gent: Gent, Faculteit van de Landbouwwetenschappen: XXVII International Symposium on Phytopharmacy and Phytiatry, 1975.: XXVII Internationaal Symposium over Fytofarmacie en Fytiatrie, 1975.
DT Journal
LA French
SL English
AB Field experiments in Belgium in 1974 on limiting the spread of celery mosaic virus showed the beneficial effect of oil sprays and the use of **reflecting** surfaces to **repel aphid** vectors of the virus. At the end of the growth period, the incidence of the virus in one locality was reduced from 74% in untreated plots to 55.99% in plots sprayed with oil and to 52.87% in plots covered between the celery rows with strips of aluminium foil of a very shiny type. In a second series of

tests in another locality, infection was reduced from 14.28 to 5.86% in plots sprayed with oil and to 0.28% in plots with aluminium foil. It is pointed out, however, that **reflecting** surfaces appear to **repel aphids** only at close quarters.

L4 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 4

AN 1976:1124 CAPLUS

DN 84:1124

TI Reflective mulches and foliar sprays for suppression of aphid-borne viruses in lettuce

AU Nawrocka, B. Z.; Eckenrode, C. J.; Uyemoto, J. K.; Young, D. H.

CS Dep. Entomol., New York State Agric. Exp. Stn., Geneva, N. Y., USA

SO J. Econ. Entomol. (1975), 68(5), 694-8

CODEN: JEENAI

DT Journal

LA English

AB Field tests indicated that **reflective** mulches **repelled** alate **aphids** and reduced incidence of cucumber mosaic virus (CMV) in late-planted lettuce, but did not adequately suppress wingless **aphids**. Acephate [30560-19-1], pirimicarb [23103-98-2], demeton [8065-48-3], and to a lesser extent, parathion [56-38-2], controlled apterous aphids but did not significantly decrease virus transmission. Oil sprays (2.5%) did not decrease CMV incidence or suppress aphid populations. Yellow pan water traps showed that peak aphid flights occurred in August and *Myzus persicae* was the predominating vector on the lettuce. CMV and trace amts. of broad bean wilt virus and lettuce mosaic virus were detected in infected lettuce by using either differential symptoms produced on the host range indicator, visualization of virus particles in an electron microscope, or serology.

L4 ANSWER 34 OF 37 CABA COPYRIGHT 2000 CABI

AN 76:32337 CABA

DN 760532112

TI Control of celery mosaic virus by oil sprays and **reflectors repellent** to vectors

Lutte contre le virus de la mosaïque du celeri par des pulvérisations d'huile et des réflectants repulsifs pour vecteurs

AU Esparza-Duque, J.; Verhoyen, M.; Duque, J. Esparza-

CS Laboratoire de Phytopathologie, Université Catholique de Louvain, B 1348, Louvain-la-Neuve, Belgium.

SO Annales de Phytopathologie, (1975) Vol. 7, No. 1, pp. 61-70. 2 fig. 25 ref.

DT Journal

LA French

SL English

AB Comparative tests on the control of the **aphid** vectors of celery mosaic virus by means of oil sprays and **repellent reflective** surfaces (Kraft paper backed with aluminium) [cf. RAE/A 57, 2236, etc.] were carried out in Louvain in Belgium. The results, details of which are given in graphs and tables, showed that the aluminium strips between the rows protected the celery plants better from the virus, with fewer aphids present, than did the oil sprays, regardless of the number of applications; both treatments, however, had some effect. Rows in which both types of treatment were used together had a lower incidence of infection at first, as compared with only one type, but this was no longer true at harvest, probably because of the lack of persistence of the oil sprays. Although there was little difference in weight between treated and untreated plants, the commercial quality of the plants was improved by all treatments.

L4 ANSWER 35 OF 37 CABA COPYRIGHT 2000 CABI

AN 75:32846 CABA

DN 750531984

TI Protecting peppers from aphid-borne viruses with aluminum foil or plastic mulch

AU Loebenstein, G.; Alper, M.; Levy, S.; Palevitch, D.; Menagem, E.

CS Virus Laboratory, ARO, Volcani Center, Bet Dagan, Israel.

SO Phytoparasitica, (1975) Vol. 3, No. 1, pp. 43-53. 12 ref.

DT Journal
LA English
AB In Israel, aluminum foil and plastic mulch, covering 57-83% of the ground beneath peppers [*Capsicum annuum*] from the time of germination, effectively protected the crop against **aphid-borne** cucumber mosaic and potato virus Y by **repelling** winged **aphids**. Aluminum foil and grey plastic sheets gave the best results, followed closely by white plastic on black. The mulches were most efficient during the first 3 weeks in the field, after which they lost some of their reflectance. Trappings of winged aphids from the aluminum-covered plots during the first 3 weeks amounted to only 2 and 5% of the numbers taken in untreated plots; the corresponding percentages in the plots where grey plastic was used were between 6 and 12. *Myzus persicae* (Sulz.) was especially sensitive to **reflection**, and trappings in the aluminum and grey plastic plots during the first 3 weeks were less than 0.6 and 2% of the control, respectively. **Repellence** of winged **aphids** was correlated with virus incidence, especially during years with high natural virus spread; infection rates in the mulched plots at harvest time reached only 4.5-6%, as compared with 45% in the controls. As a result, yields were markedly higher, with the single exception of an aluminum-mulched plot where in one season, plant growth was retarded, perhaps due to lower soil temperature.

L4 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2000 ACS

AN 1971:446984 CAPLUS

DN 75:46984

TI Comparative toxicity of diethyltoluamide synthesized from petroleum and coal m-xylene

AU Gleiberman, S. E.; Volkova, A. P.

CS Vses. Nauchno-Issled. Inst. Dezinfekts. Steril., Moscow, USSR

SO Med. Parazit. Parazit. Bolez. (1971), 40(1), 39-45

CODEN: MPPBAB

DT Journal

LA Russian

AB Investigations of diethyltoluamide synthesized from petroleum m-xylene as compared with diethyltoluamide synthesized from coal m-xylene demonstrated that these substances were similar by the parameters of toxicity, the character of the local irritation effect on the skin and mucous membranes of warmblooded animals and man, the skin-resorptive effect, and their allergenic properties. Changes in the initial raw materials were not **reflected** in the toxic properties of this **insect repellent**.

L4 ANSWER 37 OF 37 AGRICOLA

AN 70:48785 AGRICOLA

DN 70-9050092

TI **Repelling aphids by reflective surfaces**, a new approach to the control of **insect-transmitted viruses**

AU Smith, F F; Webb, R E

AV DNAL (309.9 N216)

SO Nat Agr Plast Conf Proc, 1968 No. 8, pp. 89-97.

NTE Bibliography: p. 96-97.

DT Journal; Article

LA English